

Appn. No. 10/615,342  
Ammdt dated October 4, 2005  
Amendment

PATENT

**APPENDIX**

**ABSTRACT**

A computer implemented process for producing a representation of a reference spectrum for a hypothetical solution having a first pH condition, for use in determining the composition of a test sample, is disclosed. The process involves producing a position value for at least one peak of the reference spectrum in response to a measured pH condition of the test sample and a property of at least one peak in a base reference spectrum for the hypothetical solution, the base reference spectrum being associated with a pH condition of the hypothetical solution that is different from said measured pH condition.